

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
31 July 2003 (31.07.2003)

PCT

(10) International Publication Number  
WO 03/061580 A2

(51) International Patent Classification<sup>7</sup>: A61K

(21) International Application Number: PCT/US03/01622

(22) International Filing Date: 17 January 2003 (17.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/349,929 18 January 2002 (18.01.2002) US

(71) Applicant (for all designated States except US): THE GOVERNMENT OF THE USA as represented by THE SECRETARY OF THE DEPT. OF HEALTH AND HUMAN SERVICES [US/US]; OTT-NIH, 6011 Executive Boulevard, Room 325, Rockville, MD 20852 (US).

(72) Inventors; and

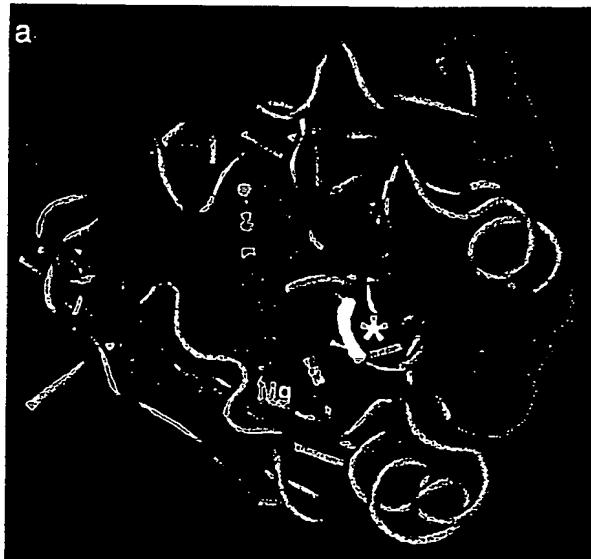
(75) Inventors/Applicants (for US only): PAVAN, William, J. [US/US]; 7724 Warbler Lane, Derwood, MD 20855 (US). LOFTUS, Stacie, K. [US/US]; 10829 Monticello Drive, Great Falls, VA 22066 (US).

(74) Agents: SAMPSON, Elizabeth, R. et al.; Townsend and Townsend and Crew LLP, Two Embarcadero Center, Eighth Floor, San Francisco, CA 94111 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: ALTERATION OF RAB38 FUNCTION TO MODULATE MAMMALIAN PIGMENTATION



a  
  
b

MRAB38	1	-----M P P H R E H L Y K I L L V I G D L G V G K T S I I K F R Y V H O N F
MRAB38	1	-----M P P H R E H L Y K I L L V I G D L G V G K T S I I K F R Y V H O N F
MRAB38	1	-----M P P H R E H L Y K I L L V I G D L G V G K T S I I K F R Y V H O N F
MRAB38A	1	-----M A G A T D S R Y T Q Q K E S S D Q M F I T P V H C G C S E V G K T S I I F P A D G F
MRAB38	1	-----M A G A T D S R Y T Q Q K E S S D Q M F I T P V H C G C S E V G K T S I I F P A D G F
MRAB38	1	-----M A G A T D S R Y T Q Q K E S S D Q M F I T P V H C G C S E V G K T S I I F P A D G F

(57) Abstract: The present invention relates to compositions and methods involving melanocytes. In particular, the present invention provides compositions and methods involving RAB38 and mutant RAB38, suitable for use in modulation of pigmentation and for use in determining the means to diagnose and/or treat conditions associated with disorders in pigmentation.

WO 03/061580 A2

BEST AVAILABLE COPY